



Siting, Transmission and Environmental Protection (STEP) Division

Pre-Bid Conference for the

Delegate Chief Building Official (DCBO) Request for Qualifications

Geyzers Geothermal; Sonoma, Quicksilver, Lakeview, Socrates, Calistoga, and Grant

California Energy Commission, Sacramento, CA.

May 29, 2019



DCBO Pre-Bid Conference

Contracts and Loan Division

- Brad Worster, *Commission Agreement Officer*

Siting Transmission & Environmental

Protection Division (STEP)

- Christine Root, *STEP Compliance Office Manager*
- Eric Veerkamp, *Compliance Project Manager*



CBO Authority / DCBO

The Energy Commission is the Chief Building Official (CBO) and has the responsibility of enforcing the California Building Code.

- Authority to delegate to either a local building official or an independent third party.

The Delegate CBO represents the Energy Commission:

- Engineering plan review and on-site inspections.
- Staff retains CBO authority:
 - Interpretation and enforcement of state and local codes.



DCBO Pre-Bid Conference

- The six Geysers individual dry steam geothermal electricity generating facilities are undergoing a process to recommission the fire prevention and suppression systems.
- The major structures of each are a turbine building, cooling tower, electrical switchyard, and employs a Stretford abatement system that chemically oxidizes hydrogen sulfide (H_2S) in the non-condensable gas stream and converts it to elemental sulfur.
- Each facility will may involve work on one or more of the following elements/systems.



DCBO Pre-Bid Conference, Con't.

- Installation of submersible pumps;
- Installation of diesel pumps;
- Fire system piping changes;
- Design of NFPA fire protection system (deluge system) for motors on cooling towers;
- Installation of NFPA fire systems and repairs;
- Fire protection system testing;
- Fire alarm system installation and testing;
- Cooling tower upgraded wetting system design and installation;
- Cooling tower wetting system testing;



DCBO Pre-Bid Conference Key Items To be Aware Of

- Zero Sum Contract
- Winning firm will contract directly with Calpine for payment after completing negotiations with the Energy Commission.
- Rates will be negotiated through the Energy Commission Process.
- Third Party Beneficiary Agreement (Attachment 10)



DCBO Pre-Bid Conference

Key evaluation criteria

Minimum Requirements

- 1) Certification Regarding Conflicts of Interest. NOTE: this requirement is applicable to each individual participating in this contract
- 2) Project Team Minimum Requirements Forms



Minimum Requirements Certification Regarding Conflicts of Interest COI Form- Attachment 8

ATTACHMENT 8

CERTIFICATION REGARDING CONFLICTS OF INTEREST California Energy Commission Delegated Chief Building Officials

Purpose of Certification

Firms that submit a Statement of Qualifications for and are selected as the Delegated Chief Building Official ("DCBO") for Energy Commission power plant projects must complete this certification regarding conflicts of interest.

The Firm is responsible for having assigned personnel, employees, and subcontractors who perform work under Tasks 3 through 7 complete the certification and for reviewing each certification at multiple points: (1) When the Firm submits a Statement of Qualifications to the Energy Commission; (2) within 30 business days from the date of the contract start date; and (3) every twelve months until the contract end date. This third phase of review will ensure that each employee and subcontractor of the Firm has considered his or her relationship with the project owner and project entities as such list is subject to change over the life of the project. The third review does not require the completion of a new form, but will require the DCBO to provide a written confirmation that a verbal verification was made for Section 3 of all employees and subcontractors who perform work under Tasks 3-7 under the particular contract, and will include a list of those individuals' names. Upon request, the Commission Agreement Manager (CAM) will provide the DCBO with the current list of project owners and project entities.

Whenever there is a change in project owners or project entities, the CAM will provide a new list to the Firm, at which time the Firm will follow the procedures for the third review as noted above.

Completed certifications must be returned to the CAM to be filed with the Construction Progress Reports. No work under the contract will be authorized until all persons assigned to the project by the Firm have signed this certification.

Please be advised that this certification is a tool to help the Energy Commission identify perceived conflicts of interest for a given power plant project in a timely manner.

The Firm may also find this certification helpful for continually reviewing for potential conflicts of interest.

If you are unable to complete this certification, or if you have any questions, please contact the CAM, who will work with an Energy Commission attorney to help you resolve any issues or concerns.

Please see Exhibit F, Conflict of Interest Provisions (Attachment 8a) for additional conflict of interest requirements.

Section 1. Firm Employee/Subcontractor Information

Firm Employee/Subcontractor Name:	Date:	Daytime Phone Number:
Firm Name:	E-mail Address:	
Contract Number:		
Name of Power Plant Project:		

Section 2. Project Owners and Project Entities

List known project owners and project entities associated with the project listed in Section 1, including the project owner(s) (if different from "applicant"), applicant, applicant's contractors for the project, intervenors, and intervenor's contractors for the project. [Note: The CAM will provide the Firm with a list of project owners and project entities associated with the project.]

For example:

Blythe Solar Power Project:

Section 3. Conflicts of Interest

Please carefully consider each statement below with respect to the persons and entities listed in Section 2. Do not change or modify any of the statements below.

1. Within the last 12 months, have you entered into an agreement or working relationship with anyone, or negotiated or made arrangements concerning employment with any person or entity listed in Section 2?
If your response is 'Yes', please identify the person(s) and/or entity(ies) and the project name:

☐ Yes
☐ No



Minimum Requirements Certification Regarding Conflicts of Interest COI Form- Attachment 8

2. Have you, your spouse, or a dependent member of your family received or been promised income aggregating \$500 or more in value from any person or entity listed in Section 2 in the last 12 months?
If your response is 'Yes', please identify the person(s) and/or entity(ies):
- ☐ Yes
☐ No
3. Have you received or been promised one or more gifts aggregating \$460 or more in value from any person or entity listed in Section 2 in the last 12 months?
If your response is 'Yes', please identify the person(s) and/or entity(ies):
- ☐ Yes
☐ No
4. Do you or your spouse have an investment worth \$2,000 or more in any person or entity listed in Section 2?
If your response is 'Yes', please identify the person(s) and/or entity(ies):
- ☐ Yes
☐ No
5. Whether compensated or uncompensated, do you or your spouse serve as director, officer, partner, trustee, elected official, employee, or member, or hold any other position of management in any entity listed in Section 2?
If your response is 'Yes', please identify the person(s) and/or entity(ies):
- ☐ Yes
☐ No
6. Do you or your spouse have any business affiliation with any person or entity listed above?
If your response is 'Yes', answer the following questions.
If your response is 'No', skip the following questions and please sign and date the form.
- ☐ Yes
☐ No
- a. Do you or your spouse serve on a board that has a contract with any person or entity listed in Section 2?
☐ Yes
☐ No
- b. Is any person or entity listed in Section 2 a member of a board on which you or your spouse also serve?
☐ Yes
☐ No
- c. Is your spouse a contractor for any person or entity listed above?
☐ Yes
☐ No

Please describe any other affiliation you or your spouse may have with each person or entity

Section 4. Certification

I declare, under penalty of perjury, that the information and statements in this form are true, correct, and complete to the best of my knowledge.

Firm Employee/Subcontractor Signature

Date

I certify that I have reviewed this form, and that the information and statements in this form are true, correct, and complete to the best of my knowledge.

Signature of Authorized Representative for Firm

Date

listed above:



Minimum Requirements

Project Team Project Qualifications

Attachment 11

Delegated Position	Minimum Qualification Requirements	Experience Requirements	Education/ License/ Certification Requirements
Chief Building Official (CBO)	Verifiable experience as a Chief Building Official on complex industrial facilities* in California	Minimum 2 years as a CBO on a complex industrial facility*	Minimum Combination Building Inspector, from a recognized state, national or international organization
Fire Marshall	Certified California Fire plan reviewer and certified California fire inspector with verifiable experience as a Fire Marshall on complex industrial facilities* in California	Minimum 2 years, reviewing fire plans for a complex industrial facility*	Minimum Fire Marshall and Fire Plans Reviewer from a recognized state, national or international organization
Fire Protection Engineer	California licensed fire protection engineer with verifiable knowledge and experience in fire protection engineering, and is fully competent and proficient in reviewing construction documents (plans, calculations and specifications) of complex industrial facilities*	Minimum 2 years, reviewing plans for complex industrial facilities*	Engineering degree that is licensed and in good standing with the California Department of Consumer Affairs, Board for Professional Engineers, Land Surveyors and Geologists for the discipline to be reviewed



Administrative Items

Grounds for rejection

- Submitting Statement of Qualifications (SOQ) late
- Missing required forms or signatures
- Conflict of Interest
- Anything marked “Confidential” or “Proprietary”
- Submitting multiple SOQs
- Unreported Public Interest Energy Research Program Royalties



ACTIVITIES AND KEY DATES

ACTIVITIES	ACTION DATE
RFQ Release	May 17, 2019
Pre-Bid Conference*	May 29, 2019
Written Question Submittal Deadline by 5:00 p.m. PST	May 29, 2019
Distribute Questions / Answers and Addenda (if any)	June 3, 2019
Deadline to submit SOQ by 5:00 p.m PST.*	June 17, 2019
SOQ Discussions with Firms	Week of June 24, 2019
Notice of Selection	July 10, 2019
Cost Negotiations	Week of July 15, 2019
Notice of Proposed Award	July 29, 2019
Energy Commission Business Meeting	August 14, 2019
Contract Start Date	August 15, 2019
Contract End Date	August 15, 2022

* An addendum will be released if the dates change for the asterisked (*) activities.



STEP Division Website, ListServer, Project FSA, and DCBO RFQ Solicitation Files

Siting Transmission & Environmental Protection Division

<http://www.energy.ca.gov/siting/>

Energy Commission ListServers

<http://www.energy.ca.gov/listservers/>

Geysers Final Commission Decision(s)

Available Upon Request

Geysers DCBO Solicitation Files

<http://www.energy.ca.gov/contracts/>



Questions?



America's Premier Competitive Power Company
... Creating Power for a Sustainable Future



The Geysers DCBO RFP

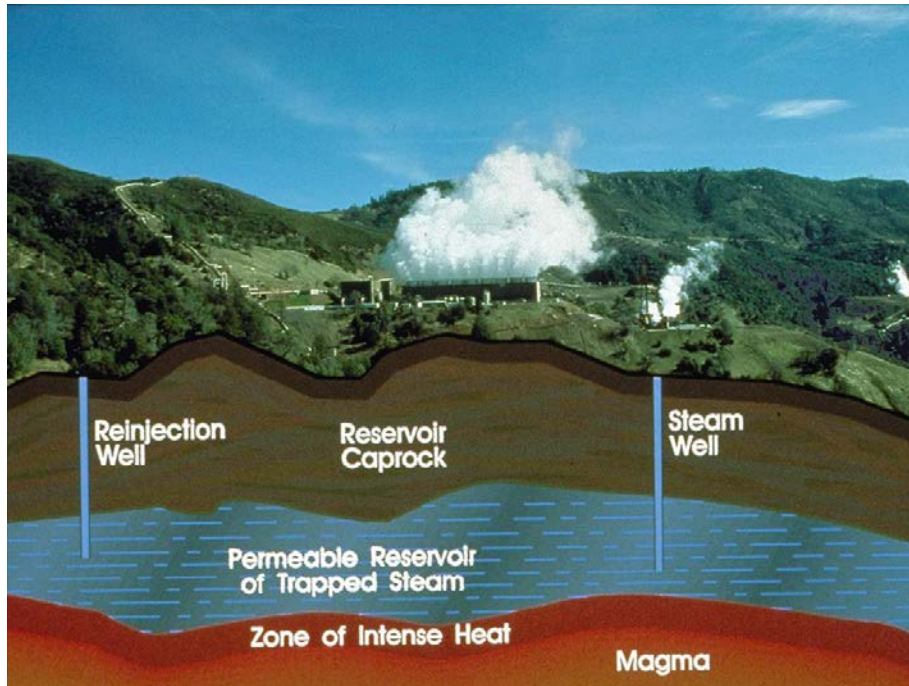
May 29, 2019

AN OVERVIEW OF THE GEYSERS



The Geysers Overview

- Largest Geothermal Energy Complex in the World (725 MW/825 MW)
- Thirteen Power Plants:
 - Six CEC Jurisdictional
 - Seven Local Agency Jurisdictional
- 45 square miles over two counties (29,000 acres)
- 70 miles of steam lines
- 80 miles of injection lines
- 300 employees



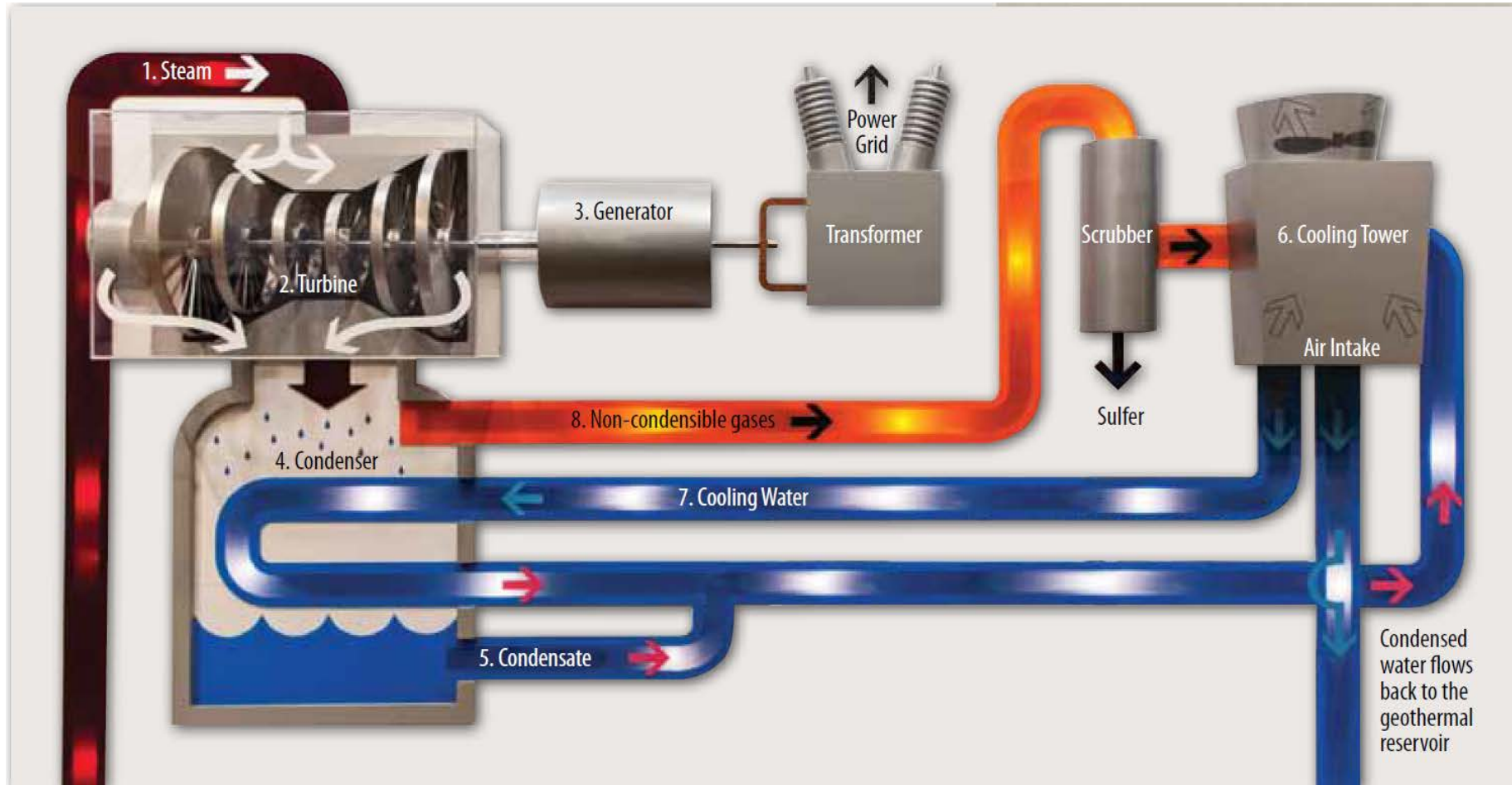
CEC Jurisdictional Power Plants

Six separate California Energy Commission jurisdictional geothermal facilities owned by Geysers Power Company, LLC:

- Sonoma Geothermal (Unit 3; 80-AFC-01C)
- Quicksilver Geothermal (Unit 16; 79-AFC-05C)
- Lakeview Geothermal (Unit 17; 79-AFC-01C)
- Socrates Geothermal (Unit 18; 79-AFC-03C)
- Calistoga Geothermal Power Plant (Unit 19; 81-AFC-01C)
- Grant (Unit 20; 82-AFC-01C)



HOW DO POWER PLANTS AT THE GEYSERS WORK?



HOW DO POWER PLANTS AT THE GEYSERS WORK?

The major components in a geothermal power plant at *The Geysers* are the steam turbine, generator, condenser, cooling tower, vacuum system and hydrogen sulfide (H₂S) abatement system.

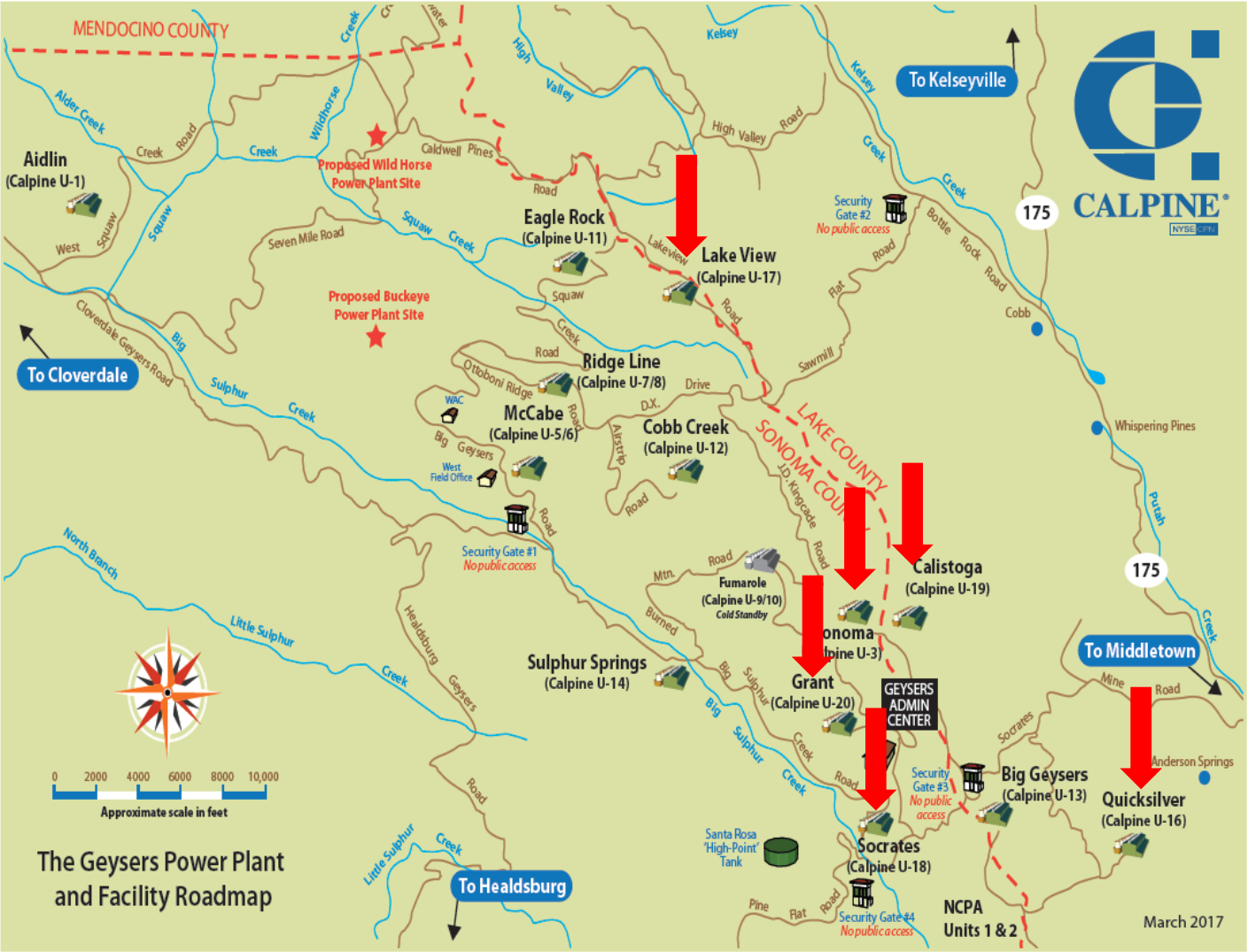
Thermal energy in the form of pressurized steam flows to the power plant from steam wells through insulated steel pipelines. The steam enters the turbine at 40 - 100 psig.

As the steam expands through the turbine, its thermal energy is converted into mechanical shaft energy. The steam turbine is directly coupled to the generator, which converts that mechanical energy into electrical energy.

Spent steam exhausts from the turbine into the condenser and is condensed into steam condensate (liquid water). The condenser is operated under vacuum to allow the turbine to extract the maximum amount of energy from each pound of steam.

The steam condensate goes to the cooling tower, where a portion is evaporated to create cool water that is pumped back to the condenser to condense the steam exiting the turbine, completing the cycle. Any residual condensate from the cooling tower is injected back into the steam reservoir to make additional steam.

THE GEYSERS TODAY



Fire Systems Re-Commissioning Process

- Develop Basis of Design
- Verify and document that all fire protection and life safety equipment and systems have been installed in accordance with the construction documents and applicable codes and standards and to perform their function(s) as intended
- Consult with the CEC to decide if proposed upgrades/changes to the original BOD require Delegate Chief Building Official (DCBO) oversight or possible petition to amend the license.
- Verify and document that all fire protection and life safety systems have been completed, inspected, successfully tested and approved.



Items Included in the BOD

- 
- **Fire Alarm System**
 - **Gaseous Suppression System & Electrical Spaces Fire Protection**
 - **Wet/Dry Pipe Sprinkler Systems**
 - **Smoke/Heat Detectors & Manual Pull Stations**
 - **Fixed Water Spray System**
 - **Pre-Action and Manual Sprinkler Systems**
 - **Fire Service Mains**
 - **Fire Pump System**
 - **Cooling Tower Upgraded Wetting System (Wet Down)**
 - **Fire Standpipe Hose Valves/Stations**
 - **Water Piping Freeze Protection**
 - **Fire Department Connection**
 - **Water Supply for Process & Operation Use**

Scope of DCBO Services

- These facilities were all constructed in the early 1980s.
- Activities that are expected to be part of the recommissioning process for one or all of the facilities may include:
 - Installation of submersible pumps;
 - Installation of diesel pumps;
 - Fire system piping changes;
 - Design of NFPA fire protection system (deluge system) for motors on cooling towers;
 - Installation of NFPA fire systems and repairs





QUESTIONS?



